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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

D AGOSTA, STEPHEN M

ART UNIT PAPER NUMBER

2683

DATE MAILED: 08/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/995,926

Applicant(s)

SHARP, IAIN

Examiner

Stephen M. D'Agosta

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 November 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Oath/Declaration

The Oath/Declaration does not make a claim for benefit to application 60/253596.

Drawings

The drawings filed 11-28-01 have been reviewed by the draftsman and examiner.

Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Preliminary Amendment

The preliminary amendment filed 11-28-01 has been received.

Claim Objections

Claims 6-7 objected to because of the following informalities: these claims refer to "a plurality of mobile stations according to claim 5" but claim 5 does not disclose a plurality of mobile stations – for the purposes of examination, the examiner will interpret claims 6-7 as one mobile station. Appropriate correction is required. Failure to correct will lead to a USC 112 rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-2, 10 and 13-14 rejected under 35 U.S.C. 102(e) as being anticipated by Miyashita US 6,415,159 (hereafter Miyashita).

As per **claim 1**, Miyashita teaches a method of setting up a call in a communication network using a mobile station in the absence of a SIM card (abstract and figure 4, Step 12), comprising obtaining default information from the mobile station which is stored elsewhere than on a SIM card and using the said information to carry out substantially standard call setup procedures in a cellular mobile communication network (C2, L20-32, C4, L48-63, C5, L1-33 and figure 4 shows using PHS-mode if no SIM card is installed, S12 and S33 to END).

The examiner notes that the phone, when determining no SIM card is present, switches to PHS-mode which must inherently use “PHS operational parameters” inherently located in storage/memory – these are replaced with “GSM operational parameters” and downloaded to memory when a SIM card is present (Note that the abstract teaches a mode set being memorized in a mode memory).

As per **claim 2**, Miyashita teaches claim 1 wherein the network provides limited functionality to the mobile station as a consequence of the use of the default information during call setup (C1, L5-50 teaches use of GSM when SIM is present, eg. normal mode, and use of PHS when no SIM is present, eg. limited mode). Note that the examiner interprets Miyashita’s disclosure of GSM being worldwide as NORMAL MODE and PHS as being used mainly in Japan as being LIMITED MODE.

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As per **claim 10**, Miyashita teaches a communication system comprising a plurality of mobile stations (figure 1 is a phone) and a network operable to provide wireless communications services to the mobile stations (figure 1 shows GSM and PHS transceivers for communication to GSM/PHS networks), at least one of the mobiles including a default identity value which is used by the network to provision a subset of the wireless communication services (C4, L23-63 teaches operation on either GSM operation if a SIM is inserted and/or defaulting to PHS service if no SIM is inserted).

As per **claim 13**, Miyashita teaches claim 10 wherein a plurality of mobile stations have/include different respective default identity values (C4, L23-63 teaches each phone as defaulting to a specific identity such that the PHS system can distinguish each user from each other user which reads on the claim).

As per **claim 14**, Miyashita teaches claim 10 wherein the default value is a predetermined IMSI (C4, L23-63 teaches defaulting to PHS operation if a SIM card is not installed which would inherently require the phone to have a pre-stored or predetermined PHS phone number, eg. IMSI, such that the network can uniquely identify the user via their phone/IMSI number).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3 and 11 rejected under 35 U.S.C. 103(a) as being unpatentable over Miyashita as applied to claims 1/10 above, and further in view of Hoirup et al. US 6,397,054 (hereafter Hoirup).

As per **claim 3**, Miyashita teaches claim 2 **but is silent on** wherein functionality is limited to setting up emergency calls.

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Hoirup teaches In addition, a new service type is added to the service request message (i.e., CM SERVICE REQUEST) in order to identify that the service requested by the mobile station is an emergency short message service. As a result, it is possible to establish emergency calls using the Short Message Service, even in those situations in which a mobile station is located in a geographic area in which communications for lower priority communicating would be prohibited, the user's subscription is limited, or the user has no subscriber identification module (SIM) card or a broken SIM card (C5, L20-30).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Miyashita, such that functionality is limited to setting up emergency calls, to provide means for only allowing certain calls to be connected if the user has not inserted a SIM card for authentication by the network.

As per **claim 11**, Miyashita teaches claim 10 **but is silent on** wherein functionality is limited to setting up emergency calls.

Hoirup teaches a new service type is added to the service request message (i.e., CM SERVICE REQUEST) in order to identify that the service requested by the mobile station is an emergency short message service. As a result, it is possible to establish emergency calls using the Short Message Service, even in those situations in which a mobile station is located in a geographic area in which communications for lower priority communicating would be prohibited, the user's subscription is limited, or the user has no subscriber identification module (SIM) card or a broken SIM card (C5, L20-30).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Miyashita, such that functionality is limited to setting up emergency calls, to provide means for only allowing certain calls to be connected if the user has not inserted a SIM card for authentication by the network.

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Claim 4 rejected under 35 U.S.C. 103(a) as being unpatentable over Miyashita.

As per **claim 4**, Miyashita teaches claim 2 **but is silent on** wherein the functionality is limited to the setting up of non-chargeable calls.

Miyashita does teach use of dual-band phones for optimum use based on enabled area, busy state of lines, communication fee and the like of each system (C1, L22-27) which reads on the second LIMITED MODE only allowing/supporting certain specific actions (eg. communication fee being zero and/or allowing a collect call to be connected since the callee will have to pay for the cost of the call since no SIM was used and hence the caller may be calling fraudulently).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Miyashita, such that the functionality is limited to the setting up of non-chargeable calls, to provide means for the phone company to receive revenue for a call when the caller cannot pay (eg. be recognized by the system if the SIM is missing) to prevent fraudulent use.

Claims 5-8 rejected under 35 U.S.C. 103(a) as being unpatentable over Miyashita and further in view of Wichmann US 6,415,160 (hereafter Wichmann).

As per **claim 5**, Miyashita teaches claim a mobile station for use in a cellular mobile radio network (figure 1 and C3, L39-44) comprising:

a) a SIM card reader for receiving a SIM card (figure 1, #9, #21)

b) mobile authentication means arranged to interact with the network to setup a call via the network (figure 1 #6 and #7 show GSM transceiver, figure 2, Step 13-15 shows reading SIM card for GSM data and operating in GSM mode which inherently requires authentication via the SIM card data and the GSM network), and

but is silent on

c) an identity database arranged to hold default identity data, the mobile authentication means being arranged to access the identity database in the absence of a SIM card in order to obtain identity information to use during interaction with the network during call setup.

Wichmann teaches the central management unit 1 can be connected via an interface and a line to a first subscriber 3, which, as customer adviser, directs an inquiry to the central management unit 1 concerning the presence of the necessary storage capacity for specific applications on a smart card 12. A server 4 of the central management unit 1 accepts the inquiry and generates internally a request to an application database 5 and, if appropriate, to an SIM database 6. Application-specific data, such as, e.g., the name of the respective applications, the information about the assignment of these applications with regard to the type of smart card and/or the card manufacturer and the memory requirement of the respective applications, are stored in the application database 5. The SIM database 6 stores data for selecting subscribers for specific applications and has corresponding codings of short messages for the smart card. It contains card-specific data, such as, e.g., inter alia, features for card identification (IMSI, ICCID, MSISDN), data concerning the type of card, the card manufacturer and also keys and originating addresses for a short-message storage operation of predetermined applications (C2, L59 to C3, L12).

The examiner notes that the Central Management Unit SIM database can be used as a backup to the SIM card database so that the SIM card can authenticate with the CMU database and/or receive downloads if data is lost.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Miyashita, such that an identity database arranged to hold default identity data, the mobile authentication means being arranged to access the identity database in the absence of a SIM card in order to obtain identity information to use during interaction with the network during call setup, to provide means for the phone not to have memory storage for default PHS operation, but rather store it in the network's memory/storage which can support/host huge memory stores.

As per **claim 6**, Miyashita in view of Wichmann teaches claim 5 **but is silent on** wherein each mobile station has different respective default identity data which permits the network to distinguish between mobile stations when authentication occurs in the absence of a SIM card.

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Miyashita does teach operating in GSM or PHS modes which inherently authenticate a mobile user to prevent fraudulent use of the network (figure 2, S14-15 or S21-22).

Wichmann teaches storing data in the SIM database for each of a plurality of users (C2, L45-58 and figure 1 teaches a first subscriber #3 which infers a plurality of users can be supported).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Miyashita in view of Wichmann, such that each mobile station has different respective default identity data which permits the network to distinguish between mobile stations when authentication occurs in the absence of a SIM card, to provide means for each phone to have a different "temp ID" when connecting to the default radio system to uniquely identify it.

As per **claim 7**, Miyashita in view of Wichmann teaches claim 5 **but is silent on** wherein each mobile station is arranged to be temporarily assigned different respective default identity data which permits the network to distinguish between mobile stations when authentication occurs in the absence of a SIM card.

Miyashita does teach operating in GSM or PHS modes which inherently authenticate a mobile user to prevent fraudulent use of the network [figure 2, S14-15 or S21-22] and hence each user will inherently authenticate to PHS "limited-mode" operation via data stored in the phone which would inherently include an ID to identify each mobile PHS user).

Wichmann teaches storing data in the SIM database for each of a plurality of users (C2, L45-58 and figure 1 teaches a first subscriber #3 which infers a plurality of users can be supported).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Miyashita in view of Wichmann, such that each mobile station is arranged to be temporarily assigned different respective default identity data which permits the network to distinguish between mobile stations when authentication occurs in the absence of a SIM card, to provide means for the phone to use a "temp ID" when connecting to the default radio system to uniquely identify it.

As per **claim 8**, Miyashita teaches a cellular radio network (abstract and figure 1 both teaches GSM/PHS cellular networks) comprising:

a) network authentication means (GSM and PHS inherently provide authentication of user to prevent fraudulent use. The AUTH Center is well known as providing this functionality)

b) call setup means (figure 1, #5-6 teaches PHS/GSM transceivers and antenna which support call setup/connect)

and initiate limited functionality call setup via the call setup means responsive to the default identity data (abstract and C4, 23-63)

but is silent on the network authentication means being arranged to recognize default identification data.

Wichmann teaches storing data in the SIM database for each of a plurality of users (C2, L45-58 and figure 1 teaches a first subscriber #3 which infers a plurality of users can be supported). One skilled can either have Miyashita's phone search the phone for the default PHS data during authentication and/or connect to Wichmann's SIM database for PHS data which would be used for authentication by the network as is known in the art.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Miyashita, such that the network authentication means being arranged to recognize default identification data, to provide means for the phone to obtain data from the network for authentication when a default service is used.

Claim 9 rejected under 35 U.S.C. 103(a) as being unpatentable over Miyashita in view of Wichmann as applied to claim 8 and further in view of Hoirup.

As per **claim 9**, Miyashita in view of Wichmann teaches claim 8 **but is silent on** wherein functionality is limited to setting up emergency calls.

Hoirup teaches In addition, a new service type is added to the service request message (i.e., CM SERVICE REQUEST) in order to identify that the service requested by the mobile station is an emergency short message service. As a result, it is possible to establish emergency calls using the Short Message Service, even in those situations

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in which a mobile station is located in a geographic area in which communications for lower priority communicating would be prohibited, the user's subscription is limited, or the user has no subscriber identification module (SIM) card or a broken SIM card (C5, L20-30).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Miyashita in view of Wichmann, such that functionality is limited to setting up emergency calls, to provide means for only allowing certain calls to be connected if the user has not inserted a SIM card for authentication by the network.

Claim 12 rejected under 35 U.S.C. 103(a) as being unpatentable over Miyashita as applied to claim 11 and further in view of Lin et al. US 6,366,791 (hereafter Lin).

As per **claim 12**, Miyashita teaches claim 10 **but is silent on** wherein the or each mobile station includes a plurality of default identity values.

Miyashita teaches defaulting to a specific identity such that the PHS system can distinguish each user from other users (C4, L23-63).

Lin teaches one MS 20 may have two phone numbers, X and Y, associated with it. When someone reaches the MS 20 with the number X, the MS 20 rings with one ringing pattern, whereas when someone reaches the same MS 20 with the other number, Y, the MS 20 rings with a different pattern. Judging from the ringing pattern, the mobile subscriber can tell which number he/she is reached by which reads on having a plurality of identity values (C5, L3-15).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Miyashita, such that the or each mobile station includes a plurality of default identity values, to provide means for a user to have multiple phone numbers/profiles to allow a user to customize more than one profile for their phone.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

1. Kolev et al. US 6,125,283
2. Kolev et al. US 5,884,168
3. Cassidy et al. US 6,480,725
4. Vatanen US 6,711,262

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen M. D'Agosta whose telephone number is 703-306-5426. The examiner can normally be reached on M-F, 8am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bill Trost can be reached on 703-308-5318. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Stephen D'Agosta

